2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Lunenburg, Mecklenburg

STREAM NAME: North Meherrin River

HYDROLOGIC UNIT: 03010204

SEGMENT ID.: VAP-K02R_NMR01A98

SEGMENT SIZE: 7.58 - Miles

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Couches Creek

RIVER MILE: 14.90

LATITUDE: 36.95970 **LONGTITUDE:** -78.32080

DOWNSTREAM LIMIT:

DESCRIPTION: Reedy Creek

RIVER MILE: 7.40

LATITUDE: 36.88190 **LONGTITUDE:** -78.30340

North Meherrin River from Couches Creek downstream to Reedy Creek.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Segment assessed partially supporting of the Swimmable use support goal based on a fecal coliform standard violation rate of 3/27 recorded at the Route 49 bridge (5ANMR013.95).

IMPAIRMENT SOURCE Unknown

The source of the fecal coliform violations in this segment is considered unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Lunenburg

STREAM NAME: Flat Rock Creek

HYDROLOGIC UNIT: 03010204

SEGMENT ID.: VAP-K03R_FRC01A98

SEGMENT SIZE: 9.72 - Miles

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Confluence downstream of Rte 647 bridge

RIVER MILE: 9.72

LATITUDE: 36.89700 **LONGTITUDE:** -78.12990

DOWNSTREAM LIMIT:

DESCRIPTION: Mouth

RIVER MILE: 0.00

LATITUDE: 36.79970 **LONGTITUDE:** -78.10960

Flat Rock Creek from the first confluence downstream of the Route 647 bridge to its mouth at the Meherrin River.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Segment assessed partially supporting of the Aquatic Life use support goal based on a fecal coliform violation rate of 6/27 recorded at the Route 612 bridge (5AFRC002.98).

IMPAIRMENT SOURCE Unknown

The source of the fecal coliform violations is considered unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Brunswick

STREAM NAME: Meherrin River

HYDROLOGIC UNIT: 03010204

SEGMENT ID.: VAP-K05R_MHN01B98

SEGMENT SIZE: 26.08 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Taylors Creek

RIVER MILE: 89.06

LATITUDE: 36.75320 **LONGTITUDE:** -77.99600

DOWNSTREAM LIMIT:

DESCRIPTION: Reedy Creek

RIVER MILE: 62.14

LATITUDE: 36.71340 **LONGTITUDE:** -77.68050

Meherrin River from Taylors Creek downstream to Reedy Creek.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

The Meherrin River from Taylors Creek to Reedy Creek was assessed partially supporting of the Swimmable use support goal based on fecal coliform violation rates of 3/27 at 5AMHN068.30 and 11/58 at 5AMHN082.13,

IMPAIRMENT SOURCE Unknown

Source is unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Brunswick

STREAM NAME: Great Creek

HYDROLOGIC UNIT: 03010204

SEGMENT ID.: VAP-K06R_GTC01A00

SEGMENT SIZE: 2.78 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Headwaters

RIVER MILE: 19.70

LATITUDE: 36.91550 **LONGTITUDE:** -78.03630

DOWNSTREAM LIMIT:

DESCRIPTION: Dixon Millpond

RIVER MILE: 11.70

LATITUDE: 36.88660 **LONGTITUDE:** -78.02340

Great Creek upstream of Dixon Millpond, including the pond.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Aquatic Life Use - Not Supporting

IMPAIRMENT CAUSE: pH

The segment was assessed not supporting of the Aquatic Life Use based on a pH violation rate of 10/14 at 5AGTC025.70 (previously called PL-18A), and 5/14 at 5AXEA000.04 (previously called PL-18B).

These stations are confined animal feeding operation (CAFO) special study stations.

IMPAIRMENT SOURCE Unknown

Source is unknown.

There is currently not enough data to identify the CAFO as a contributor to the impairment in this stream.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Brunswick

STREAM NAME: Great Creek

HYDROLOGIC UNIT: 03010204

SEGMENT ID.: VAP-K06R_GTC01B00

SEGMENT SIZE: 3.06 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Route 1 bridge

RIVER MILE: 14.37

LATITUDE: 36.83130 **LONGTITUDE:** -77.92680

DOWNSTREAM LIMIT:

DESCRIPTION: Downstream tributary

RIVER MILE: 11.06

LATITUDE: 36.75790 **LONGTITUDE:** -77.87260

Great Creek from the Route 1 bridge downstream to the tributary below Price Mill.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Swimmable Use - Not Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Assessed not supporting of the Swimmable Use goal based on a fecal coliform violation rate of 3/11 at PL-GR-A.

PL-GR-A is a confined animal feeding operation (CAFO) special study station located at the Route 1 bridge crossing.

IMPAIRMENT SOURCE Unknown

Source is unknown.

There is currently not enough data to identify the CAFO as a contributor to the impairment in this stream.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Brunswick

STREAM NAME: Roses Creek

HYDROLOGIC UNIT: 03010204

SEGMENT ID.: VAP-K07R_RSE01A96

SEGMENT SIZE: 3.02 - Miles

INITIAL LISTING: 1996 **TMDL Schedule** 2001 - 2004

UPSTREAM LIMIT:

DESCRIPTION: Town of Alberta STP discharge

RIVER MILE: 9.83

LATITUDE: 36.84060 **LONGTITUDE:** -77.09110

DOWNSTREAM LIMIT:

DESCRIPTION: Route 646 bridge

RIVER MILE: 6.68

LATITUDE: 38.81167 **LONGTITUDE:** -77.88250

From the Alberta Sewage Treatment Plant (STP) discharge to the Route 646 bridge. Nested in VAP-K07R-02.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Partially Supporting

IMPAIRMENT CAUSE: General Standard (Benthic)

Roses Creek from the Alberta STP discharge downstream to the Route 646 bridge was initially included on the 1996 303(d) list based on a special benthic survey performed below the STP in 1993.

The overall biological assessment for the 1998 305(b) cycle was not impaired, and there has been significant improvement since 1994. However, in 1998 there was a significant decline in the stream resulting from discharges at the Alberta STP.

IMPAIRMENT SOURCE PS - Municipal, NPS - Silviculture, Unknown

The General Standard impairment in Roses Creek was attributed to nonpoint source runoff resulting from logging operations in the watershed upstream of the monitoring station at the Route 646 bridge, and to the Alberta STP discharge. Significant improvement has been noted since 1994, with the notable exception of discharger-caused degradation in 1998. Continued monitoring to gauge the effects of the discharge on water quality in this segment is recommended.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Brunswick

STREAM NAME: Roses Creek

HYDROLOGIC UNIT: 03010204

SEGMENT ID.: VAP-K07R_RSE02A96

SEGMENT SIZE: 9.85 - Miles

INITIAL LISTING: 1996 **TMDL Schedule** 2001 - 2004

UPSTREAM LIMIT:

DESCRIPTION: Town of Alberta STP discharge

RIVER MILE: 9.83

LATITUDE: 36.84060 **LONGTITUDE:** -77.09110

DOWNSTREAM LIMIT:

DESCRIPTION: Great Creek confluence

RIVER MILE: 0.00

LATITUDE: 36.74360 **LONGTITUDE:** -77.83600

From the Alberta Sewage Treatment Plant discharge to the mouth at Great Creek.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Not Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Roses Creek from the Alberta STP discharge downstream to its mouth at Great Creek was evaluated partially supporting of the Swimmable use support goal based on a fecal coliform standard violation rate of 11/26 at the Route 678 bridge (5ARSE001.22).

IMPAIRMENT SOURCE Unknown, PS - Municipal

The impairment in this segment is potentially the result of operational problems at the Alberta STP. However, because fecal coliform monitoring performed on the Meherrin River resulted in impaired designations in adjacent watersheds, additional monitoring and source identification is necessary to identify the true source of the violations.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Greensville

STREAM NAME: Meherrin River

HYDROLOGIC UNIT: 03010204

SEGMENT ID.: VAP-K09R_MHN01D98

SEGMENT SIZE: 5.72 - Miles

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Emporia Reservoir Dam

RIVER MILE: 53.44

LATITUDE: 36.69580 **LONGTITUDE:** -77.55720

DOWNSTREAM LIMIT:

DESCRIPTION: Caney Branch

RIVER MILE: 47.70

LATITUDE: 36.67130 **LONGTITUDE:** -77.49250

The Meherrin River from the Emporia Reservoir Dam to a point about 5 miles downstream.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Partially Supporting, Fish Consumption Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform, Fish Tissue - Arsenic & Benzo(k) fluoranthene

The Meherrin River is subject to dissolved oxygen violations during summer months below the Emporia Reservoir dam as measured at the Route 302 bridge (5AMHN052.34) and verified during a special study conducted in July 1994. The segment was initially listed during the 1998 cycle as fully supporting but threatened of the Aquatic Life use support goal.

In the year 2002 cycle, The segment is assessed partially supporting of the Swimmable Use support goal based on a fecal coliform violation rate of 12/59 at 5AMHN052.34.

Beginning in the year 2002 cycle, the segment was assessed partially supporting of the fish consumption use based on 1996 fish tissue screening value exceedances for benzo(k)fluoranthene and arsenic in two species.

IMPAIRMENT SOURCE Hypolimnetic Release, Unknown

Hypolimnetic waters releases through the Emporia Reservoir Dam.

The fecal coliform source is unknown.

The source(s) of the arsenic and benzo(k)fluoranthene are considered unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Brunswick

STREAM NAME: Rattlesnake Creek

HYDROLOGIC UNIT: 03010201

SEGMENT ID.: VAP-K10R_RSK01A00

SEGMENT SIZE: 8.92 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Edwards Creek

RIVER MILE: 8.92

LATITUDE: 36.61010 **LONGTITUDE:** -77.84270

DOWNSTREAM LIMIT:

DESCRIPTION: Mouth

RIVER MILE: 0.00

LATITUDE: 36.57470 **LONGTITUDE:** -77.73350

From Edwards Creek downstream to its mouth at Fontaine Creek.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Aquatic Life Use - Partially Supporting, Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen, pH, Fecal Coliform

The segment was assessed partially supporting of both the Swimmable and Aquatic Life Uses based on sampling at the Route 672 bridge (5ARSK003.08)

Dissolved oxygen 3/26;
pH 4/26;
fecal coliform 3/26

IMPAIRMENT SOURCE Unknown

Source is unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Greensville

STREAM NAME: Fontaine Creek

HYDROLOGIC UNIT: 03010204

SEGMENT ID.: VAP-K11R_FON01A02

SEGMENT SIZE: 9.89 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Rte 633 bridge

RIVER MILE: 31.33

LATITUDE: 36.63310 **LONGTITUDE:** -77.64540

DOWNSTREAM LIMIT:

DESCRIPTION: Downstream tributary.

RIVER MILE: 24.06

LATITUDE: 36.64090 **LONGTITUDE:** -77.58770

From the Route 633 bridge to the tributary between Routes 627 and 639.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Swimmable Use - Not Supporting, Aquatic Life Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform, pH, Dissolved oxygen

Fecal coliform 2/15 at the Rt. 639 bridge (5AFON025.64)
Fecal coliform 3/12 at the Rt. 627 bridge (5AFON027.33)

pH 2/16 at 5AFON025.64
Dissolved oxygen 2/12 at 5AFON027.33

This station is a confined animal feeding operation (CAFO) special study station.

IMPAIRMENT SOURCE Unknown

Source is unknown.

There is currently not enough data to identify the CAFO as a contributor to the impairment in this stream.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Greensville

STREAM NAME: Cattail Creek

HYDROLOGIC UNIT: 03010204

SEGMENT ID.: VAP-K11R_CTT01A02

SEGMENT SIZE: 6.42 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Headwaters

RIVER MILE: 8.38

LATITUDE: 36.59060 **LONGTITUDE:** -77.66750

DOWNSTREAM LIMIT:

DESCRIPTION: Collier Branch

RIVER MILE: 2.03

LATITUDE: 36.57360 **LONGTITUDE:** -77.58720

Cattail Creek upstream of Collier Branch.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Aquatic Life Use - Not Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen, pH

The segment was assessed as not supporting the Aquatic Life Use because of violations at two locations.
DO 3/12, pH 3/12 at the Rt. 633 bridge (5ACTT005.89/PL-15A);
DO 3/12 at the Route 632 bridge (5ACTT002.73/PL-15B)

These stations are confined animal feeding operation (CAFO) special study stations.

IMPAIRMENT SOURCE Unknown

Source is unknown.

There is currently not enough data to identify the CAFO as a contributor to the impairment in this stream.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Greensville

STREAM NAME: Fontaine Creek

HYDROLOGIC UNIT: 03010204

SEGMENT ID.: VAP-K12R_FON06A00

SEGMENT SIZE: 6.42 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Mill Swamp

RIVER MILE: 6.42

LATITUDE: 36.56970 **LONGTITUDE:** -77.44150

DOWNSTREAM LIMIT:

DESCRIPTION: Meherrin River

RIVER MILE: 0.00

LATITUDE: 36.55400 **LONGTITUDE:** -77.37500

From Mill Creek to its mouth at the Meherrin River. Nested within segment VAP-K11R-03.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

The segment was assessed partially supporting of the Swimmable Use based on a fecal coliform violation rate of 6/26 at the Route 625 bridge (5AFON006.07)

IMPAIRMENT SOURCE Unknown

Source is unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Lunenburg

STREAM NAME: Modest Creek Reservoir

HYDROLOGIC UNIT: 03010201

SEGMENT ID.: VAP-K14L_MDT01L00

SEGMENT SIZE: 29 - Acres

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Extent of backwater

RIVER MILE:

LATITUDE: **LONGTITUDE:**

DOWNSTREAM LIMIT:

DESCRIPTION: Dam

RIVER MILE:

LATITUDE: **LONGTITUDE:**

Modest Creek Reservoir

CLEAN WATER ACT GOAL AND USE SUPPORT:
Aquatic Life Use - Not Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen

Modest Creek Reservoir was assessed not supporting of the Aquatic Life Use based on low dissolved oxygen at 5AMDT004.94.

IMPAIRMENT SOURCE Hypolimnetic Waters

The low DO is suspected to be caused by stratification of the lake.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Lunenburg

STREAM NAME: Big Hounds Creek

HYDROLOGIC UNIT: 03010201

SEGMENT ID.: VAP-K14R_BHC01B98

SEGMENT SIZE: 10.35 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Headwaters

RIVER MILE: 10.35

LATITUDE: **LONGTITUDE:**

DOWNSTREAM LIMIT:

DESCRIPTION: Mouth

RIVER MILE: 0.00

LATITUDE: 37.02140 **LONGTITUDE:** -78.09510

Big Hounds Creek from its headwaters to its mouth at the Nottoway River.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Segment was assessed partially supporting of the Swimmable use support goal based on a fecal coliform violation rate of 5/27 recorded at the Route 653 bridge (5ABHC003.73).

IMPAIRMENT SOURCE Unknown

Source is unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Lunenburg, Prince Edward, Nottoway

STREAM NAME: Nottoway River

HYDROLOGIC UNIT: 03010201

SEGMENT ID.: VAP-K14R_NTW01A98

SEGMENT SIZE: 17.76 - Miles

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Headwaters

RIVER MILE: 161.0

LATITUDE: 37.11140 **LONGTITUDE:** -78.26610

DOWNSTREAM LIMIT:

DESCRIPTION: Nottoway Falls Lake

RIVER MILE: 145.74

LATITUDE: 37.06080 **LONGTITUDE:** -78.16960

Nottoway River from its headwaters to the headwaters of Nottoway Falls Lake.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Not Supporting

IMPAIRMENT CAUSE: Fecal Coliform

The segment was evaluated during the 1998 cycle as fully supporting but threatened of the Swimmable use support goal based on fecal coliform violations at the Route 625 bridge (5ANTW155.06). There has been no additional monitoring since 1997. In the 2002 assessment window, the violation rate is only 1/6.

However, in 1999 EPA included this station on Attachment B of the Consent Decree ("Waters to be identified to Virginia for Listing Consideration during Development of the Next List.") Since no additional monitoring has been performed, DEQ is required to downgrade the segment to Not Supporting of the Swimmable Use goal.

The segment has been shortened so that it now ends at the extent of backwater of Nottoway Falls Lake, instead of at The Falls.

IMPAIRMENT SOURCE Unknown

The source of the fecal coliform violations in this segment is considered unknown.

Continued monitoring is necessary to increase the data set and make a confident assessment.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Nottoway

STREAM NAME: Little Nottoway River

HYDROLOGIC UNIT: 03010201

SEGMENT ID.: VAP-K15R_LNT01A00

SEGMENT SIZE: 9.85 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Lazaretto Creek

RIVER MILE: 9.85

LATITUDE: 37.11980 **LONGTITUDE:** -78.08440

DOWNSTREAM LIMIT:

DESCRIPTION: Mouth

RIVER MILE: 0.00

LATITUDE: 37.02220 **LONGTITUDE:** -78.00500

Little Nottoway River from Lazaretto Creek downstream to its mouth at the Nottoway River.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Segment assessed partially supporting of the Swimmable use support goal based on a fecal coliform violation rate of 6/27 recorded at the Route 626 bridge (5ALNT004.68).

IMPAIRMENT SOURCE Unknown

The source of the impairment is considered unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Dinwiddie

STREAM NAME: Beaverpond Creek

HYDROLOGIC UNIT: 03010201

SEGMENT ID.: VAP-K16R_BPC01A00

SEGMENT SIZE: 7.17 - Miles

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Headwaters

RIVER MILE: 7.17

LATITUDE: 37.06050 **LONGTITUDE:** -77.83340

DOWNSTREAM LIMIT:

DESCRIPTION: Mouth

RIVER MILE: 0.00

LATITUDE: 36.98370 **LONGTITUDE:** -77.79900

Beaverpond Creek from its headwaters to its mouth at the Nottoway River.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Swimmable Use - Not Supporting

IMPAIRMENT CAUSE: Fecal Coliform

The segment was evaluated not supporting of the Swimmable use support goal based on a fecal coliform violation rate of 9/26 at the Route 612 bridge (5ABPC000.12).

IMPAIRMENT SOURCE Unknown

The source is considered unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Nottoway

STREAM NAME: Hurricane Branch, UT - Unnamed Tributary

HYDROLOGIC UNIT: 03010201

SEGMENT ID.: VAP-K16R_XBL01A94

SEGMENT SIZE: 1.12 - Miles

INITIAL LISTING: 1994 **TMDL Schedule** 2001 - 2004

UPSTREAM LIMIT:

DESCRIPTION: Town of Blackstone STP discharge

RIVER MILE: 1.12

LATITUDE: 37.04080 **LONGTITUDE:** -77.95450

DOWNSTREAM LIMIT:

DESCRIPTION: Hurricane Branch confluence

RIVER MILE: 0.00

LATITUDE: 37.02760 **LONGTITUDE:** -77.96040

Segment begins at the Blackstone Municipal Sewage Treatment Plant discharge, and extends downstream

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Partially Supporting

IMPAIRMENT CAUSE: General Standard (Benthic)

This segment was initially listed on the 1994 303(d) list based on benthic monitoring results. Continued benthic monitoring performed at the DEQ biological monitoring station 0.4 mile downstream of the STP discharge indicated that the benthic community was moderately impaired. As a result, the stream segment was assessed partially supporting of the Clean Water Act's Aquatic Life Use support goal for the 2002 305(b) report.

The facility has a 6/30/2002 compliance schedule for ammonia. The upgrade was completed in 2000.

IMPAIRMENT SOURCE Unknown

The impairment of this stream segment is attributed to erosion and sedimentation problems and the Town of Blackstone Municipal STP discharge.

A consent order for upgrade of the facility was approved by the SWCB March 21, 1996. The facility is currently under a schedule of compliance which will end 6/30/2002 for upgrade to meet ammonia limits. The plant upgrade was completed in late 2000 and the plant has been in substantial compliance with the permit's ammonia nitrogen limits since then.

The facility is currently on EPA's 304(l) list for copper, lead and zinc. A metals translator study showed that the metals concentrations in the effluent were below water quality standards. However, the 1998 permit reissuance resulted in the limits for copper, lead and zinc being replaced with a minimum hardness limit;

above this level, copper, lead and zinc do not show toxicity at the levels historically reported from this discharge. Although the facility is on the 304(l) list, no further action is required for these metals.

Town is currently subject to all of the final limits contained in the 1998 permit reissuance.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Brunswick

STREAM NAME: Waqua Creek

HYDROLOGIC UNIT: 03010201

SEGMENT ID.: VAP-K17R_WAQ01A98

SEGMENT SIZE: 5.56 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Great Branch

RIVER MILE: 5.59

LATITUDE: 36.93660 **LONGTITUDE:** -77.78470

DOWNSTREAM LIMIT:

DESCRIPTION: Mouth

RIVER MILE: 0.00

LATITUDE: 36.91640 **LONGTITUDE:** -77.71960

Waqua Creek from Great Branch downstream to its mouth at the Nottoway River.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Segment evaluated partially supporting of the Swimmable use support goal based on a fecal coliform violation rate of 3/27 at the Route 712 bridge (5AWAQ001.40).

IMPAIRMENT SOURCE Unknown

The source of the fecal coliform violations is considered unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Brunswick

STREAM NAME: Waqua Creek

HYDROLOGIC UNIT: 03010201

SEGMENT ID.: VAP-K17R_WAQ01B00

SEGMENT SIZE: 2.18 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Headwaters

RIVER MILE: 17.45

LATITUDE: 36.91840 **LONGTITUDE:** -78.01250

DOWNSTREAM LIMIT:

DESCRIPTION: Route 46 bridge

RIVER MILE: 15.35

LATITUDE: 36.92480 **LONGTITUDE:** -77.98330

Waqua Creek upstream of the Route 46 bridge

CLEAN WATER ACT GOAL AND USE SUPPORT:
Aquatic Life Use - Not Supporting, Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen, pH, Fecal Coliform

The segment was assessed not supporting of the Aquatic Life Use and partially supporting of the Swimmable Use based on the following violations:
pH 7/14 at 5AWAQ020.52 (Route 617);
DO 2/10, pH 9/10 at 5AWAQ022.17;

Fecal coliform 3/13 at 5AWAQ020.52.

These stations are confined animal feeding operation (CAFO) special study stations.

IMPAIRMENT SOURCE Unknown

Source is unknown. Suspected to be caused by natural conditions.

Source is unknown.

There is currently not enough data to identify the CAFO as a contributor to the impairment in this stream.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Sussex

STREAM NAME: Stony Creek

HYDROLOGIC UNIT: 03010201

SEGMENT ID.: VAP-K21R_STO02B00

SEGMENT SIZE: 5.62 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Galley Swamp

RIVER MILE: 5.62

LATITUDE: 37.96200 **LONGTITUDE:** -77.43950

DOWNSTREAM LIMIT:

DESCRIPTION: Mouth

RIVER MILE: 0.00

LATITUDE: 37.94730 **LONGTITUDE:** -77.38070

The mainstem of Stoney Creek from Galley Swamp downstream to its mouth

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Partially Supporting, Aquatic Life Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform, pH

The segment was assessed partially supporting of the Swimmable and Aquatic Life Uses based on a fecal coliform violation rate of 3/26 and a pH violation rate of 5/27 at the Route 301 South bridge (5ASTO001.20).

IMPAIRMENT SOURCE Unknown

Source is unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Dinwiddie, Sussex

STREAM NAME: Sappony Creek

HYDROLOGIC UNIT: 03010201

SEGMENT ID.: VAP-K22R_SAP01A00

SEGMENT SIZE: 20.19 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Headwaters

RIVER MILE: 25.70

LATITUDE: 37.01750 **LONGTITUDE:** -77.72130

DOWNSTREAM LIMIT:

DESCRIPTION: Spiers Pond

RIVER MILE: 4.70

LATITUDE: 36.93360 **LONGTITUDE:** -77.49050

Sappony Creek from its headwaters downstream to Spiers Pond.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

The segment was listed in 1998 as fully supporting but threatened. It was later identified to Virginia for listing consideration. The segment was downgraded and extended during the 2002 assessment cycle because of a dissolved oxygen violation rate of 3/26 and a fecal coliform violation rate of 3/27 at the Route 619 bridge (5ASAP013.69).

The segment length was based on the results of a 1994 special study:
DO 1/1 at 5ASAP021.69 (Rt. 1 bridge);
DO 1/1 at 5ASAP018.57 (Rt. 709 bridge);
DO 1/1 at 5ASAP007.77 (Rt. 665 bridge);
DO 1/1 at 5ASAP005.54 (Rt. 40 bridge).

IMPAIRMENT SOURCE Unknown

The DO violations in this segment are attributed to natural conditions.

The source of the fecal coliform violations is considered unknown.

Targeted monitoring and wetland delineation may be necessary to identify the limits of the segment affected by natural conditions. Such segments should be reclassified as wetlands where appropriate.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Dinwiddie

STREAM NAME: Rowanty Creek

HYDROLOGIC UNIT: 03010201

SEGMENT ID.: VAP-K23R_ROW02A00

SEGMENT SIZE: 1.11 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Gravelly Run

RIVER MILE: 13.80

LATITUDE: 37.09420 **LONGTITUDE:** -77.47410

DOWNSTREAM LIMIT:

DESCRIPTION: Little Cattail Creek

RIVER MILE: 12.70

LATITUDE: 37.08240 **LONGTITUDE:** -77.46690

Rowanty Creek from Gravelly Run to Little Cattail Creek. Nested in segment VAP-K23R-01.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

This segment of Rowanty Creek is considered partially supporting the Aquatic Life Use based on a fecal coliform violation rate of 6/26 at the Route 605 bridge (5AROW013.14).

IMPAIRMENT SOURCE Unknown

Source is unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Sussex, Southampton

STREAM NAME: Raccoon Creek

HYDROLOGIC UNIT: 03010201

SEGMENT ID.: VAP-K25R_RCN01A02

SEGMENT SIZE: 19.3 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Headwaters

RIVER MILE: 19.30

LATITUDE: 36.81600 **LONGTITUDE:** -77.44430

DOWNSTREAM LIMIT:

DESCRIPTION: Mouth

RIVER MILE: 0.00

LATITUDE: 36.80560 **LONGTITUDE:** -77.24000

The entire mainstem of Raccoon Creek.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

The segment was initially listed as fully supporting but threatened of the swimmable use goal during the 1998 303(d) cycle. It was then identified to Virginia for listing consideration. During the 2002 303(d) cycle the segment is considered partially supporting of the swimming goal based on a fecal coliform violation rate of 4/21 at the Route 608 bridge (5ARCN003.36).

IMPAIRMENT SOURCE Unknown

The source of the fecal coliform violations is considered unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Sussex, Greensville

STREAM NAME: Three Creek

HYDROLOGIC UNIT: 03010201

SEGMENT ID.: VAP-K26R_TRE02B98

SEGMENT SIZE: 6.44 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Otterdam Swamp

RIVER MILE: 28.00

LATITUDE: 36.71520 **LONGTITUDE:** -77.46040

DOWNSTREAM LIMIT:

DESCRIPTION: Browns Branch

RIVER MILE: 20.50

LATITUDE: 36.69740 **LONGTITUDE:** -77.38250

From Otterdam Swamp downstream to Browns Branch. Nested in segment VAP-K26R-01.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

The segment was assessed partially supporting of the Swimmable use support goal based on a fecal coliform violation rate of 5/21 at 5ATRE026.75 (Route 611 bridge).

IMPAIRMENT SOURCE Unknown

Source is unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Sussex, Greensville

STREAM NAME: Otterdam Swamp, Three Creek

HYDROLOGIC UNIT: 03010201

SEGMENT ID.: VAP-K26R_TRE01B98

SEGMENT SIZE: 19.16 - Miles

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Hickory Swamp

RIVER MILE: 4.80

LATITUDE: 36.74480 **LONGTITUDE:** -77.53030

DOWNSTREAM LIMIT:

DESCRIPTION: Browns Branch

RIVER MILE: 20.5

LATITUDE: 36.69740 **LONGTITUDE:** -77.38250

Otterdam Swamp from Hickory Swamp to its mouth, and Three Creek from the Slagles Lake Dam downstream to Browns Branch.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Not Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen, pH

Otterdam Swamp from Hickory Swamp to its mouth, and Three Creek from Otterdam Swamp to Browns Branch were assessed not supporting of the Aquatic Life use support goal based on a dissolved oxygen violation rate of 8/27 and a pH violation rate of 4/27 at 5ATRE026.75 (Route 611 bridge), as well as the results of a 1994 special study:

DO 1/1 at 5AOTD008.23 (Route 610 bridge);
DO 2/2 at 5AOTD004.31 (Route 609 bridge).

Three Creek from Slagles Lake Dam downstream to Otterdam Swamp was assessed as threatened based on the same special study:
DO 1/2 at 5ATRE031.85 (Route 616 bridge)
DO 1/2 at 5ATRE033.87 (Route 617 bridge).

IMPAIRMENT SOURCE Hypolimnetic Waters, Natural Conditions

During summertime low flow conditions, when there is no flow over Slagles Lake dam, hypolimnetic waters seepage occurs under the dam. Additional flow from downstream sources is suspected to further depress DO levels upstream of the Route 616 bridge. The Three Creek STP discharges upstream at the Route 616 bridge, and is predicted to have an impact on DO levels in Three Creek below the discharge.

The DO violations recorded at the Route 611 bridge monitoring station are attributed to natural conditions.

Targeted monitoring during low flow conditions is recommended to determine the extent of DO depletion when there is no water being released over Slagles Lake dam. Targeted monitoring and wetland delineation may be necessary to identify the limits of the segment affected by natural conditions.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Southampton

STREAM NAME: Three Creek (Lower portion in K27)

HYDROLOGIC UNIT: 03010201

SEGMENT ID.: VAT-K27R_TRE01B00

SEGMENT SIZE: 10.04 - Miles

INITIAL LISTING: 1996 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Segment begins 0.3 mi. downstream Rt 308, upstream of Southampton Correctional Farm.

RIVER MILE: 10.04

LATITUDE: 36.73020 **LONGTITUDE:** -77.25150

DOWNSTREAM LIMIT:

DESCRIPTION: Segment ends at the confluence of Three Creek with the Meherrin River.

RIVER MILE: 0.00

LATITUDE: 36.79450 **LONGTITUDE:** -77.16210

Segment from 0.3 mi. downstream Rt 308 to confluence with Meherrin River.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Violations of standards for Dissolved Oxygen and pH were recorded at station on the lower portion of Three Creek (5ATRE008.48) to assess this segment as partially supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. Violations of standard for Fecal Coliform Bacteria recorded at monitoring station on Three Creek (5ATRE008.48) is reason to assess this segment as partially supporting of the Clean Water Act's Swimming Use Support Goal for the 2002 305(b) report. Cause of the D.O. and pH standard violations are attributed to naturally occurring conditions. Cause of the Fecal Coliform bacteria standard violation is unknown.

IMPAIRMENT SOURCE Unknown

The source of the impairment is attributed to naturally occurring conditions.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Sussex

STREAM NAME: Seacorrie Swamp

HYDROLOGIC UNIT: 03010201

SEGMENT ID.: VAP-K29R_SRE01A02

SEGMENT SIZE: 6.9 - Miles

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Headwaters

RIVER MILE: 6.90

LATITUDE: 36.95290 **LONGTITUDE:** -77.04940

DOWNSTREAM LIMIT:

DESCRIPTION: Mouth at Assamoosick

RIVER MILE: 0.00

LATITUDE: 36.92490 **LONGTITUDE:** -77.12390

Seacorrie Swamp from its headwaters to its mouth at Assamoosick Swamp

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Not Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Seacorrie Swamp was assessed not supporting of the Swimmable Use based on a fecal coliform exceedance rate of 8/12 at Smithfield Carroll's farm (5ASRE005.89) and 5/12 at the Route 606 bridge (5ASRE002.12).

IMPAIRMENT SOURCE Unknown

The source is unknown. There is not enough information to determine if the Confined Animal Feeding Operation (CAFO) is a contributing source.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Sussex

STREAM NAME: Black Swamp

HYDROLOGIC UNIT: 03010201

SEGMENT ID.: VAP-K29R_BLS01A00

SEGMENT SIZE: 3.77 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Headwaters

RIVER MILE: 3.77

LATITUDE: 37.06660 **LONGTITUDE:** -77.17840

DOWNSTREAM LIMIT:

DESCRIPTION: Mouth at Assamoosick Swamp

RIVER MILE: 0.00

LATITUDE: 37.02260 **LONGTITUDE:** -77.14300

Black Swamp from its headwaters to its mouth at Assamoosick Swamp.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Black Swamp is assessed as partially supporting the Swimmable Use based on a fecal coliform standard violation rate of 3/20 at the Route 626 bridge (5ABLS001.58).

IMPAIRMENT SOURCE Unknown

Source is unknown

There is not enough data to determine if the CAFO facility is the source of the impairment in this segment.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Sussex

STREAM NAME: Assamoosick Swamp, UT

HYDROLOGIC UNIT: 03010201

SEGMENT ID.: VAP-K29R_XDW01A02

SEGMENT SIZE: 2.05 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Headwaters

RIVER MILE: 2.05

LATITUDE: 36.89020 **LONGTITUDE:** -77.09210

DOWNSTREAM LIMIT:

DESCRIPTION: Mouth at Assamoosick

RIVER MILE: 0.00

LATITUDE: 36.88090 **LONGTITUDE:** -77.12170

UT to Assamoosick Swamp

CLEAN WATER ACT GOAL AND USE SUPPORT:
Swimmable Use - Not Supporting

IMPAIRMENT CAUSE: Fecal Coliform

The segment was assessed not supporting of the Swimmable Use based on a fecal coliform exceedance rate of 4/11 at 5AXDW001.85 , a Confined Animal Feeding Operation (CAFO) special study station.

IMPAIRMENT SOURCE Unknown

Source is unknown.

There is not enough information to determine if the CAFO is a contributing source.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Sussex

STREAM NAME: Seacorrie Swamp, UT

HYDROLOGIC UNIT: 03010201

SEGMENT ID.: VAP-K29R_XDX01A02

SEGMENT SIZE: 1.46 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Headwaters

RIVER MILE: 1.46

LATITUDE: 36.93640 **LONGTITUDE:** -77.03830

DOWNSTREAM LIMIT:

DESCRIPTION: Mouth at Seacorrie Swamp

RIVER MILE: 0.00

LATITUDE: 36.94220 **LONGTITUDE:** -77.06000

UT to Seacorrie Swamp

CLEAN WATER ACT GOAL AND USE SUPPORT:
Swimmable Use - Not Supporting

IMPAIRMENT CAUSE: Fecal Coliform

This segment was assessed as not supporting the Swimmable Use based on a fecal coliform violation rate of 8/16 at 5AXDX001.35, a Confined Animal Feeding Operation special study station.

IMPAIRMENT SOURCE Unknown

Source is unknown. The upstream hogfarms are a suspected contributor.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Sussex

STREAM NAME: Assamoosick Swamp

HYDROLOGIC UNIT: 03010201

SEGMENT ID.: VAP-K29R_ASM01A98

SEGMENT SIZE: 15.38 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Headwaters

RIVER MILE: 23.80

LATITUDE: 37.02990 **LONGTITUDE:** -77.14110

DOWNSTREAM LIMIT:

DESCRIPTION: Route 607 bridge

RIVER MILE: 8.12

LATITUDE: 36.83940 **LONGTITUDE:** -77.11700

Assamoosick Swamp

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

The segment was initially listed as fully supporting but threatened of the swimmable use goal in the 1998 303(d) list. The segment was identified to Virginia for listing consideration. During the 2002 cycle, the segment is considered partially supporting of the swimmable use goal based on the following violation rates:
Fecal coliform 2/12 at Route 655 bridge (5AASM021.22);
Fecal coliform 2/11 at Route 634 bridge (5AASM018.95);
Fecal coliform 5/27 at Route 622 bridge (5AASM013.36);
Fecal coliform 3/27 at Route 607 bridge (5AASM008.12).
.

IMPAIRMENT SOURCE Unknown

Source is unknown

There is not enough data to determine if the CAFO facility is the source of the impairment in this segment.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Prince George, Surry, Sussex

STREAM NAME: Blackwater Swamp, Warwick Swamp

HYDROLOGIC UNIT: 03010202

SEGMENT ID.: VAP-K31R_BLW01A98

SEGMENT SIZE: 43.83 - Miles

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Headwaters

RIVER MILE: 13.10

LATITUDE: 37.18580 **LONGTITUDE:** -77.38740

DOWNSTREAM LIMIT:

DESCRIPTION: Blackwater River

RIVER MILE: 0.00

LATITUDE: 37.10100 **LONGTITUDE:** -77.14500

Blackwater Swamp and Warwick Swamp from their headwaters to the Blackwater River.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Not Supporting, Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen, pH, Fecal Coliform

Blackwater Swamp and Warwick Swamp were assessed not supporting of the Aquatic Life Use and partially supporting of the Swimmable Use based on widespread violations:

DO 12/27, pH 11/27, FC 4/26 at the Rt. 625 bridge (5ABKR003.68/5ABLW092.62).
DO 7/27, pH 22/27 FC 5/26 at the Rt. 627 bridge (5AWKS009.11);

1994-1995 exceedances:
DO 1/2, pH 1/2 at Rt. 625 bridge (5AWKS006.46);
DO 1/2, pH 1/2 at Rt. 624 bridge (5AWKS003.66);
DO 1/2, pH 2/2 at Rt. 460 bridge (5AWKS002.12);
DO 5/7, pH 3/7 at Rt. 613 bridge (5AWKS001.00).

The TMDL for Blackwater Swamp's fecal coliform impairment is not due until 2014.

IMPAIRMENT SOURCE Unknown

The DO and pH violations are suspected to be caused by natural swampwater conditions throughout the watershed.

The source of the fecal coliform violations is considered unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Surry

STREAM NAME: Cypress Swamp

HYDROLOGIC UNIT: 03010202

SEGMENT ID.: VAP-K32R_CPP02A00

SEGMENT SIZE: 5.35 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Johnchecohunk Swamp

RIVER MILE: 4.70

LATITUDE: 37.07400 **LONGTITUDE:** -76.91750

DOWNSTREAM LIMIT:

DESCRIPTION: Mouth at Blackwater River

RIVER MILE: 0.00

LATITUDE: 37.02600 **LONGTITUDE:** -76.89160

Cypress Swamp downstream of Johnchecohunk Swamp. Nested within segment VAP-K32R-06.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

This segment was assessed partially supporting of the Swimmable Use based on a fecal coliform violation rate of 4/25 at 5ACPP003.20.

IMPAIRMENT SOURCE Unknown

Source is unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Sussex, Surry

STREAM NAME: Blackwater River

HYDROLOGIC UNIT: 03010202

SEGMENT ID.: VAP-K32R_BLW01B98

SEGMENT SIZE: 24.55 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Warwick Swamp

RIVER MILE: 88.00

LATITUDE: 37.10100 **LONGTITUDE:** -77.14500

DOWNSTREAM LIMIT:

DESCRIPTION: Cypress Swamp, Route 617 bridge

RIVER MILE: 58.22

LATITUDE: 37.02600 **LONGTITUDE:** -77.89160

Blackwater River from Warwick Swamp to Cypress Swamp

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

This segment was assessed not supporting of the Aquatic Life Use goal based on the following violations:
DO 18/57, pH 11/57 at the Rt. 40 bridge (5ABLW074.66)
DO 11/58, pH 8/58 at the Rt. 617 bridge (5ABLW058.22)
1994 stations:
DO 4/6, pH 3/6 at the 5ABLW087.70;
DO 3/4, pH 1/4 at 5ABLW069.30;
DO 3/3, pH 1/3 at 5ABLW064.46;

The segment was assessed partially supporting of the Swimmable Use based on a fecal coliform violation rate of 10/57 at 5ABLW074.66 and 8/58 at 5ABLW058.22.

IMPAIRMENT SOURCE Unknown

The DO and pH violations in this segment are attributed to natural conditions.

Targeted monitoring and wetland delineation may be necessary to identify the limits of the segment affected by natural conditions. Such segments should be reclassified as wetlands where appropriate.

The source of the fecal coliform violations is considered unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Sussex

STREAM NAME: Spring Branch

HYDROLOGIC UNIT: 03010202

SEGMENT ID.: VAP-K32R_SRN01A94

SEGMENT SIZE: 3.52 - Miles

INITIAL LISTING: 1994 **TMDL Schedule** 2001 - 2010

UPSTREAM LIMIT:

DESCRIPTION: Borden Chemical Waverly Plant discharge

RIVER MILE: 2.70

LATITUDE: 37.05500 **LONGTITUDE:** -77.12140

DOWNSTREAM LIMIT:

DESCRIPTION: Blackwater River confluence

RIVER MILE: 0.00

LATITUDE: 37.06640 **LONGTITUDE:** -77.07140

From the Spurlock Adhesives discharge to the confluence with the Blackwater River

CLEAN WATER ACT GOAL AND USE SUPPORT:
Aquatic Life Use - Not Supporting

IMPAIRMENT CAUSE: General Standard (Benthic)

Severely impaired benthic community.

There are four biological monitoring stations on Spring Branch. 5ASRN002.96 is located upstream of all the discharges; 5ASRN002.66 is located 50 yards below the Route 460 bridge; 5ASRN001.24 is located 100 yards below the Town of Waverly Municipal STP discharge; and 5ASRN000.65 is located downstream of Bryant's Pond, near the mouth of Spring Branch. All the stations, with the exception of the control station upstream of the discharges, rated moderately to severely impaired.

IMPAIRMENT SOURCE Unknown, PS - Industrial, Municipal Point Sources

The source of the impairment of Spring Branch is unknown. There are one municipal discharge and two industrial discharges to the stream. There are also extensive sludge deposits, attributed to the old Waverly primary plant (it has been upgraded to secondary treatment), in Spring Branch and Bryant's Pond, 1/4 mile downstream of the Waverly STP discharge.

Additional targeted monitoring is required to further characterize the nature of the impairment and to identify specific causes and sources.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Sussex

STREAM NAME: Coppahaunk Swamp

HYDROLOGIC UNIT: 03010202

SEGMENT ID.: VAP-K32R_CPH01A98

SEGMENT SIZE: 12.49 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Headwaters

RIVER MILE: 12.30

LATITUDE: 37.02140 **LONGTITUDE:** -77.11430

DOWNSTREAM LIMIT:

DESCRIPTION: Mouth at Blackwater River

RIVER MILE: 0.00

LATITUDE: 37.03690 **LONGTITUDE:** -76.96880

Mainstem from its headwaters to its mouth.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Coppahaunk Swamp was assessed not supporting of the Aquatic Life Use based on the following violation rates:
DO 4/12, pH 3/12 at 5ACPH006.00;
pH 6/9, Phosphorus 8/8 at 5AXDT000.50;
pH 5/12, Phosphorus 3/11 at 5AXDU000.62
DO 1/1 at 5ACPH002.59 (1994 station)

The segment was assessed partially supporting of the Swimmable Use based on fecal coliform violation rates of 2/12 at 5ACPH006.00, 3/9 at 5AXDT000.50, and 2/12 at 5AXDU000.62.

These are confined animal feeding operation (CAFO) special study stations.

IMPAIRMENT SOURCE Unknown, NPS - Agriculture

The source of the fecal coliform and phosphorus violations is considered unknown, although the confined animal feeding operations are suspected.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Surry

STREAM NAME: Otterdam Swamp

HYDROLOGIC UNIT: 03010202

SEGMENT ID.: VAP-K32R_OTR01A98

SEGMENT SIZE: 11.53 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Headwaters

RIVER MILE: 12.40

LATITUDE: 37.14170 **LONGTITUDE:** -77.18540

DOWNSTREAM LIMIT:

DESCRIPTION: Mouth at Blackwater River

RIVER MILE: 0.00

LATITUDE: 37.07020 **LONGTITUDE:** -77.04490

Mainstem from its headwaters to its mouth.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Not Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen, pH, Phosphorus, Ammonia

Otterdam Swamp is considered not supporting of the Aquatic Life Use based on numerous water quality standard violations.

DO 5/12, pH 3/12, Phosphorus 2/11 at 5AOTR001.26;
DO 3/13, pH 6/13, Phosphorus 3/10, Ammonia 1 violation at 5AOTR004.31;
DO 2/11, pH 6/11 at 5AOTR005.69;
pH 4/10, Phosphorus 6/9 at 5AXDR000.38 ;
pH 9/9 at 5AXDS000.54

These are confined animal feeding operation (CAFO) special study stations.

IMPAIRMENT SOURCE Natural Conditions, Unknown, NPS - Agriculture

The DO and pH violations are suspected to be caused by natural swampwater conditions throughout the watershed.

The source of the ammonia and phosphorus violations is currently considered unknown, but the upstream hogfarms are suspected to be a contributing source.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Surry

STREAM NAME: Otterdam Swamp

HYDROLOGIC UNIT: 03010202

SEGMENT ID.: VAP-K32R_OTR02A00

SEGMENT SIZE: 5.58 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Averys Pond

RIVER MILE: 5.58

LATITUDE: 37.11600 **LONGTITUDE:** -77.09370

DOWNSTREAM LIMIT:

DESCRIPTION: Mouth at Blackwater River

RIVER MILE: 0.00

LATITUDE: 37.07020 **LONGTITUDE:** -77.04490

Otterdam Swamp downstream of Averys Pond. Nested within segment VAP-K32R-03.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Not Supporting

IMPAIRMENT CAUSE: Fecal Coliform

The segment was assessed not supporting of the Swimmable Use goal based on the following fecal coliform violation rates:
FC 2/12 at 5AOTR001.26;
FC 6/11 at 5AXDR000.38;
FC 4/13 at 5AOTR004.31.
These are confined animal feeding operation (CAFO) special study stations.

IMPAIRMENT SOURCE Unknown

Source is unknown. There is not enough data to determine if the CAFO facilities are the source of impairment in this segment.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Isle of Wight

STREAM NAME: Rattlesnake (Creek) Swamp

HYDROLOGIC UNIT: 03010202

SEGMENT ID.: VAT-K34R_RKN01A00

SEGMENT SIZE: 7.5 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Upstream 5.00 mi. from station 5ARKN006.40 @ Rt. 625 crossing.

RIVER MILE: 7.50

LATITUDE: 36.96100 **LONGTITUDE:** -76.73790

DOWNSTREAM LIMIT:

DESCRIPTION: Downstream 5.00 mi. from Rt. 625 crossing.

RIVER MILE: 0.00

LATITUDE: 36.91240 **LONGTITUDE:** -76.81550

Segment extends up and downstream 5.00 mi. from station at Rt 625 bridge.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Not Supporting, Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen, Fecal Coliform

Sufficient violations of water quality standards for Dissolved Oxygen were recorded at DEQ's ambient water quality monitoring station on Rattlesnake Swamp (5ARKN006.40) to assess this segment as not supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. Sufficient violations of Virginia's water quality standard for Fecal Coliform Bacteria were recorded at the above monitoring station to assess this segment as partially supporting of the Clean Water Act's Swimming Use Support Goal for the 2002 305(b) report. During the assessment period the pH parameter recorded only 2 exceedances out of 57 observations. THIS SEGMENT for pH IS PROPOSED FOR DELISTING, as it now shows full support by the pH parameter. Sufficient violations of water quality standards for pH (9/34) were recorded at DEQ's ambient water quality monitoring station on Rattlesnake Swamp (5ARKN006.40) in the 1998 assessment to list this segment in the 1998 303d as partially supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 1998 305(b) report. The cause of the D.O. standard violation is attributed to naturally occurring conditions. The cause of the Fecal Coliform bacteria standard violation is unknown.

IMPAIRMENT SOURCE Unknown

The source of the impairment is attributed to naturally occurring conditions.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Isle of Wight

STREAM NAME: Mill Swamp

HYDROLOGIC UNIT: 03010202

SEGMENT ID.: VAT-K34R_MSW01A00

SEGMENT SIZE: 10.13 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Segment begins at start of Mill swamp (confluence with Moores Swamp).

RIVER MILE: 10.13

LATITUDE: 36.95910 **LONGTITUDE:** -76.77190

DOWNSTREAM LIMIT:

DESCRIPTION: Segment ends at the confluence with Rattlesnake Swamp.

RIVER MILE: 0.00

LATITUDE: 36.04920 **LONGTITUDE:** -76.83040

Segment from confluence with Moores Swamp to confluence with Rattlesnake Swamp.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Violations of standard for Dissolved Oxygen and pH were recorded at a station on Mill Swamp (5AMSW006.77) to assess this segment as not supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. Violations of standard for FC bacteria recorded at the above station to assess this segment as partially supporting of the Clean Water Act's Swimming Use Support Goal for the 2002 305(b) report. The cause of the D.O. and pH standard violations are attributed to naturally occurring conditions. The cause of the FC bacteria standard violation is unknown.

IMPAIRMENT SOURCE Unknown

The source of the impairment is attributed to naturally occurring conditions.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Chesapeake, Virginia Beach, Cities of

STREAM NAME: Pocaty River

HYDROLOGIC UNIT: 03010205

SEGMENT ID.: VAT-K41R_PCT01A00

SEGMENT SIZE: 6.61 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Segment begins at the headwaters of Pocaty Creek.

RIVER MILE: 6.61

LATITUDE: 36.68023 **LONGTITUDE:** -76.15293

DOWNSTREAM LIMIT:

DESCRIPTION: Segment ends downstream at the confluence of Pocaty Creek with the North Landing River.

RIVER MILE: 0.00

LATITUDE: 36.67785 **LONGTITUDE:** -76.06976

Segment from headwaters downstream to confluence with North Landing River.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Not Supporting, Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen, Fecal Coliform, Nutrients

Sufficient exceedances of Virginia's water quality standard for Dissolved Oxygen were recorded on Pocaty Creek (5BPCT001.79) to assess this segment as not supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. This is an area of hardwood swamp/wetlands where low dissolved oxygen levels can naturally occur. Sufficient exceedance of the nutrient screening value for total phosphorus at the above monitoring station is used to justify use of Best Professional Judgement to evaluate this segment as threatened of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. Sufficient violations of Virginia's water quality standard for Fecal Coliform Bacteria were recorded at the above monitoring station to assess this segment as partially supporting of the Clean Water Act's Swimming Use Support Goal for the 2002 305(b) report. The cause of the depressed Dissolved Oxygen concentrations is currently unknown, but is suspected to be naturally occurring. The cause of the elevated total phosphorus is attributed to naturally occurring conditions. The cause of the Fecal Coliform bacteria standard violation is unknown.

IMPAIRMENT SOURCE Unknown

The Pocaty River monitoring station is located at the Route 190 (Blackwater Road) Bridge, in the Fentress area of Virginia Beach. The land use in the watershed is mixed forested, agricultural production, and residential. The watershed potentially receives inputs from wetlands areas, residential sewage treatment systems, and storm water runoff associated with the surrounding residential /agricultural area. This is an area of hardwood swamp/wetlands where low dissolved oxygen levels can naturally occur. The specific source of the enteric bacteria causing the elevated Fecal Coliform Bacteria levels is currently unknown. The specific

source of the depressed dissolved oxygen concentrations is believed due to high organic content and stagnant flow conditions.

Additional monitoring is necessary to determine whether the bacteria impairment is not naturally occuring.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Chesapeake, Virginia Beach, Cities of

STREAM NAME: Milldam Creek

HYDROLOGIC UNIT: 03010205

SEGMENT ID.: VAT-K41R_MLD01A00

SEGMENT SIZE: 3.29 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Segment begins at the headwaters of Blackwater Creek.

RIVER MILE: 3.29

LATITUDE: 36.57907 **LONGTITUDE:** -76.08000

DOWNSTREAM LIMIT:

DESCRIPTION: Segment ends at the confluence of Blackwater Creek with the North Landing River.

RIVER MILE: 0.00

LATITUDE: 36.59748 **LONGTITUDE:** -76.04874

Segment from headwaters downstream to confluence with North Landing River.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Not Supporting, Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen, Fecal Coliform, Nutrients

Sufficient exceedances of Virginia's water quality standard for Dissolved Oxygen were recorded on Milldam Creek (5BMLD001.92) to assess this segment as partially supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. This is an area of hardwood swamp/wetlands where low dissolved oxygen levels can naturally occur. Sufficient exceedance of the nutrient screening value for total phosphorus at the above monitoring station is used to justify use of Best Professional Judgement to evaluate this segment as threatened of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. Sufficient violations of Virginia's water quality standard for Fecal Coliform Bacteria were recorded at the above monitoring station to assess this segment as partially supporting of the Clean Water Act's Swimming Use Support Goal for the 2002 305(b) report. The cause of the depressed Dissolved Oxygen concentrations is currently unknown, but is suspected to be naturally occurring. The cause of the elevated total phosphorus is attributed to naturally occurring conditions. The cause of the Fecal Coliform bacteria standard violation is unknown.

IMPAIRMENT SOURCE Unknown

The Milldam Creek monitoring station is located at the Route 190 (Blackwater Road) Bridge, in the Fentress area of Virginia Beach. The land use in the watershed is mixed forested, agricultural production, and residential. The watershed potentially receives inputs from wetlands areas, residential sewage treatment systems, and storm water runoff associated with the surrounding residential /agricultural area. This is an area of hardwood swamp/wetlands where low dissolved oxygen levels can naturally occur. The specific source of the enteric bacteria causing the elevated Fecal Coliform Bacteria levels is currently unknown. The specific

source of the depressed dissolved oxygen concentrations is believed due to high organic content and stagnant flow conditions.

Additional monitoring is necessary to determine whether the impairment is not naturally occuring.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Virginia Beach, City of

STREAM NAME: West Neck Creek (Upper)

HYDROLOGIC UNIT: 03010205

SEGMENT ID.: VAT-K41R_WNC01A00

SEGMENT SIZE: 3.17 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Segment begins at the headwaters of West Neck Creek, near Shipps Corner.

RIVER MILE: 10.82

LATITUDE: 36.79381 **LONGTITUDE:** -76.07029

DOWNSTREAM LIMIT:

DESCRIPTION: Segment ends at Princess Anne Road crossing of west Neck Creek.

RIVER MILE: 7.65

LATITUDE: 36.75587 **LONGTITUDE:** -76.03996

Segment from headwaters (Shipps Corner) to Princess Anne Road crossing.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Partially Supporting, Swimmable Use - Not Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen, Fecal Coliform

Exceedances of standard for D.O. recorded @ (5BWNC010.02) to assess this segment as partially supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. This is an area of hardwood swamp/wetlands where low dissolved oxygen levels can naturally occur. Exceedance of the nutrient screening value for TP at above station used to evaluate this segment as threatened of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. Violations of standard for FC Bacteria recorded at above station to assess this segment as not supporting of the Clean Water Act's Swimming Use Support Goal for the 2002 305(b) report. Cause of the depressed D.O. is unknown, but may be naturally occurring. Cause of elevated TP is unknown. Cause of the FC bacteria is unknown.

IMPAIRMENT SOURCE Unknown

The West Neck Creek monitoring station is located at Ships Corner Road Bridge over the creek in the City of Virginia Beach. The watershed receives inputs from storm water runoff associated with the surrounding residential /urban area. The specific source of the impairment is currently unknown.

Targeted monitoring is necessary to further delineate the extent of impairment and to characterize its causes and sources.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHOWAN RIVER AND DISMAL SWAMP BASIN

CITY/COUNTY: Virginia Beach, City of

STREAM NAME: Nawney Creek

HYDROLOGIC UNIT: 03010205

SEGMENT ID.: VAT-K42E_NWN01B00

SEGMENT SIZE: 0.52 - Sq. Mi.

INITIAL LISTING: 1996 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: One- half mile upstream Nawney Cr.

RIVER MILE: 0.92

LATITUDE: 36.64688 **LONGTITUDE:** -76.00733

DOWNSTREAM LIMIT:

DESCRIPTION: Confluence with Back Bay

RIVER MILE: 0.00

LATITUDE: 36.63523 **LONGTITUDE:** -75.99317

Segment begins one-half mile upstream of the Nawney Creek Road bridge crossing Nawney Creek.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Violations of the FC bacteria standard at station 5BNWN000.00 to assess this segment as partially supporting of the Clean Water Act's Swimming Use Support Goal for the 2002 305(b) report. Exceedance of the nutrient screening value at the above station by use of Best Professional Judgement to evaluate this segment as threatened of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. The cause of the FC bacteria standard violation is the presence of enteric bacteria.

IMPAIRMENT SOURCE Unknown

The Nawney Cr. station is located at the confluence of Nawney Cr./ Back Bay (5BNWN000.00). The land use in the watershed is primarily agricultural and livestock production. Nearby farm fields are spray irrigated using effluent from animal rearing facilities. The watershed potentially receives inputs from residential sewage treatment systems, wetlands areas, and storm water runoff associated with the surrounding residential /agricultural area. The specific source of the enteric bacteria causing the Fecal Coliform Bacteria standard violations is currently unknown.